MTBN1
MTAEPEVRTLREVVLDQLGTAESRAYKMWLPPLTNPVPLNELIARDRRQPLRFALGIMDE
PRRHLQDVWGVDVSGAGGNIGIGGAPQTGKSTLLQTMVMSAAATHSPRNVQFYCIDLGGG
GLIYLENLPHVGGVANRSEPDKVNRVVAEMQAVMRQRETTFKEHRVGSIGMYRQLRDDPS
QPVASDPYGDVFLIIDGWPGFVGEFPDLEGQVQDLAAQGLAFGVHVIISTPRWTELKSRV
RDYLGTKIEFRLGDVNETQIDRITREIPANRPGRAVSMEKHHLMIGVPRFDGVHSADNLV
EAITAGVTQIASQHTEQAPPVRVLPERIHLHELDPNPPGPESDYRTRWEIPIGLRETDLT
PAHCMHTNPHLLIFGAAKSGKTTIAHAIARAICARNSPQQVRFMLADYRSGLLDAVPDT
HLLGAGAINRNSASLDEAVQALAVNLKKRLPPTDLTTAQLRSRSWWSGFDVVLLVDDWHM
IVGAAGGMPPMAPLAPLLPAAADIGLHIIVTCQMSQAYKATMDKFVGAAFGSGAPTMFLS
GEKQEFPSSEFKVKRRPPGQAFLVSPDGKEVIQAPYIEPPEEVFAAPPSAG*

MTBN2
MEKMSHDPIAADIGTQVSDNALHGVTAGSTALTSVTGLVPAGADEVSAQAATAFTSEGIQ
LLASNASAQDQLHRAGEAVQDVARTYSQIDDGAAGVFAE*

MTBN3
MLWHAMPPELNTARLMAGAGPAPMLAAAAGWQTLSAALDAQAVELTARLNSLGEAWTGGG
SDKALAAATPMVWLQTASTQAKTRAMQATAQAAAYTQAMATTPSLPEIAANHITQAVLT
ATNFFGINTIPIALTEMDYFIRMWNQAALAMEVYQAETAVNTLFEKLEPMASILDPGASQ
STTNPIFGMPSPGSSTPVGQLPPAATQTLGQLGEMSGPMQQLTQPLQQVTSLFSQVGGTG
GGNPADEEAAQMGLLGTSPLSNHPLAGGSGPSAGAGLLRAESLPGAGGSLTRTPLMSQLI
EKPVAPSVMPAAAAGSSATGGAAPVGAGAMGQGAQSGGSTRPGLVAPAPLAQEREEDDED
DWDEEDDW*

MTBN4
MAEMKTDAATLAQEAGNFERISGDLKTQIDQVESTAGSLQGQWRGAAGTAAQAAVVRFQE
AANKQKQELDEISTNIRQAGVQYSRADEEQQQALSSQMGF*

MTBN5
MAADYDKLFRPHEGMEAPDDMAAQPFFDPSASFPPAPASANLPKPNGQTPPPTSDDLSER
FVSAPPPPPPPPPPPPTPMPIAAGEPPSPEPAASKPPTPPMPIAGPEPAPPKPPTPPMP
IAGPEPAPPKPPTPPMPIAGPAPTPTESQLAPPRPPTPQTPTGAPQQPESPAPHVPSHGP
HQPRRTAPAPPWAKMPIGEPPPAPSRPSASPAEPPTRPAPQHSRRARRGHRYRTDTERNV
GKVATGPSIQARLRAEEASGAQLAPGTEPSPAPLGQPRSYLAPPTRPAPTEPPPSPSPQR
NSGRRAERRVHPDLAAQHAAAQPDSITAATTGGRRRKAAPDLDATQKSLRPAAKGPKVK
KVKPQKPKATKPPKVVSQRGWRHWVHALTRINLGLSPDEKYELDLHARVRRNPRGSYQIA
VVGLKGGAGKTTLTAALGSTLAQVRADRILALDADPGAGNLADRVGRQSGATIADVLAEK
ELSHYNDIRAHTSVNAVNLEVLPAPEYSSAQRALSDADWHFIADPASRFYNLVLADCGAG
FFDPLTRGVLSTVSGVVVVASVSIDGAQQASVALDWLRNNGYQDLASRACVVINHIMPGE
PNVAVKDLVRHFEQQVQPGRVVVMPWDRHIAAGTEISLDLLDPIYKRKVLELAAALSDDF
ERAGRR*

FIG. 1A

MTBN6
LSAPAVAAGPTAAGATAARPATTRVTILTGRRMTDLVLPAAVPMETYIDDTVAVLSEVLE
DTPADVLGGFDFTAQGVWAFARPGSPPLKLDQSLDDAGVVDGSLLTLVSVSRTERYRPLV
EDVIDAIAVLDESPEFDRTALNRFVGAAIPLLTAPVIGMAMRAWWETGRSLWWPLAIGIL
GIAVLVGSFVANRFYQSGHLAECLLVTTYLLIATAAALAVPLPRGVNSLGAPQVAGAATA
VLFLTLMTRGGPRKRHELASFAVITAIAVIAAAAFGYGYQDWVPAGGIAFGLFIVTNAA
KLTVAVARIALPPIPVPGETVDNEELLDPVATPEATSEETPTWQAIIASVPASAVRLTER
SKLAKQLLIGYVTSGTLILAAGAIAVVVRGHFFVHSLVVAGLITTVCGFRSRLYAERWCA
WALLAATVAIPTGLTAKLIIWYPHYAWLLLSVYLTVALVALVVVGSMAHVRRVSPVVKRT
LELIDGAMIAAIIPMLLWITGVYDTVRNIRF*

MTBN7
MAEPLAVDPTGLSAAAAKLAGLVFPQPPAPIAVSGTDSVVAAINETMPSIESLVSDGLPG
VKAALTRTASNMNAAADVYAKTDQSLGTSLSQYAFGSSGEGLAGVASVGGQPSQATQLLS
TPVSQVTTQLGETAAELAPRVVATVPQLVQLAPHAVQMSQNASPIAQTISQTAQQAAQSA
QGGSGPMPAQLASAEKPATEQAEPVHEVTNDDQGDQGDVQPAEVVAAARDEGAGASPGQQ
PGGGVPAQAMDTGAGARPAASPLAAPVDPSTPAPSTTTTL*

MTBN8
MSITRPTGSYARQMLDPGGWVEADEDTFYDRAQEYSQVLQRVTDVLDTCRQQKGHVFEGG
LWSGGAANAANGALGANINQLMTLQDYLATVITWHRHIAGLIEQAKSDIGNNVDGAQREI
DILENDPSLDADERHTAINSLVTATHGANVSLVAETAERVLESKNWKPPKNALEDLLQQK
SPPPPDVPTLVVPSPGTPGTPGTPITPGTPITPGTPITPIPGAPVTPITPTPGTPVTPVT
PGKPVTPVTPVKPGTPGEPTPITPVTPPVAPATPATPATPVTPAPAPHPQPAPAPAPSPG
PQPVTPATPGPSGPATPGTPGGEPAPHVKPAALAEQPGVPGQHAGGGTQSGPAHADESAA
SVTPAAASGVPGARAAAAAPSGTAVGAGARSSVGTAAASGAGSHAATGRAPVATSDKAAA
PSTRAASARTAPPARPPSTDHIDKPDRSESADDGTPVSMIPVSAARAARDAATAAASARQ
RGRGDALRLARRIAAALNASDNNAGDYGFFWITAVTTDGSIVVANSYGLAYIPDGMELPN
KVYLASADHAIPVDEIARCATYPVLAVQAWAAFHDMTLRAVIGTAEQLASSDPGVAKIVL
EPDDIPESGKMTGRSRLEVVDPSAAAQLADTTDQRLLDLLPPAPVDVNPPGDERHMLWFE
LMKPMTSTATGREAAHLRAFRAYAAHSQEIALHQAHTATDAAVQRVAVADWLYWQYVTGL
LDRALAAAC*

FIG. 1B

mtbn1

```
1     atgactgctg aaccggaagt acggacgctg cgcgaggttg tgctggacca
51    gctcggcact gctgaatcgc gtgcgtacaa gatgtggctg ccgccgttga
101   ccaatccggt cccgctcaac gagctcatcg cccgtgatcg gcgacaaccc
151   ctgcgatttg ccctggggat catggatgaa ccgcgccgcc atctacagga
201   tgtgtggggc gtagacgttt ccggggccgg cggcaacatc ggtattgggg
251   gcgcacctca aaccgggaag tcgacgctac tgcagacgat ggtgatgtcg
301   gccgccgcca cacactcacc gcgcaacgtt cagttctatt gcatcgacct
351   aggtggcggc gggctgatct atctcgaaaa ccttccacac gtcggtgggg
401   tagccaatcg gtccgagccc gacaaggtca accgggtggt cgcagagatg
451   caagccgtca tgcggcaacg ggaaaccacc ttcaaggaac accgagtggg
501   ctcgatcggg atgtaccggc agctgcgtga cgatccaagt caacccgttg
551   cgtccgatcc atacggcgac gtctttctga tcatcgacgg atggcccggt
601   tttgtcggcg agttccccga ccttgagggg caggttcaag atctggccgc
651   ccaggggctg cgttcggcg tccacgtcat catctccacg ccacgctgga
701   cagagctgaa gtcgcgtgtt cgcgactacc tcggcaccaa gatcgagttc
751   cggcttggtg acgtcaatga aacccagatc gaccggatta cccgcgagat
801   cccggcgaat cgtccgggtc gggcagtgtc gatggaaaag caccatctga
851   tgatcggcgt gcccaggttc gacggcgtgc acagcgccga taacctggtg
901   gaggcgatca ccgcgggggt gacgcagatc gcttcccagc acaccgaaca
951   ggcacctccg gtgcgggtcc tgccggagcg tatccacctg cacgaactcg
1001  acccgaaccc gccgggacca gagtccgact accgcactcg ctgggagatt
1051  ccgatcggct tgcgcgagac ggacctgacg ccggctcact gccacatgca
1101  cacgaacccg cacctactga tcttcggtgc ggccaaatcg ggcaagacga
1151  ccattgccca cgcgatcgcg cgcgccattt gtgcccgaaa cagtccccag
1201  caggtgcggt tcatgctcgc ggactaccgc tcgggcctgc tggacgcggt
1251  gccggacacc catctgctgg gcgccggcgc gatcaaccgc aacagcgcgt
1301  cgctagacga ggccgttcaa gcactggcgg tcaacctgaa gaagcggttg
1351  ccgccgaccg acctgacgac ggcgcagcta cgctcgcgtt cgtggtggag
1401  cggatttgac gtcgtgcttc tggtcgacga ttggcacatg atcgtgggtg
1451  ccgccggggg gatgccgccg atggcaccgc tggccccgtt attgccggcg
1501  gcggcagata tcgggttgca catcattgtc acctgtcaga tgagccaggc
1551  ttacaaggca accatggaca agttcgtcgg cgccgcattc gggtcgggcg
1601  ctccgacaat gttcctttcg ggcgagaagc aggaattccc atccagtgag
1651  ttcaaggtca gcggcgcccc cctggccag gcatttctcg tctcgccaga
1701  cggcaaagag gtcatccagg cccctacat cgagcctcca gaagaagtgt
1751  tcgcagcacc cccaagcgcc ggttaa
```

mtbn2

```
1     atggaaaaaa tgtcacatga tccgatcgct gccgacattg gcacgcaagt
51    gagcgacaac gctctgcacg gcgtgacggc cggctcgacg gcgctgacgt
101   cggtgaccgg gctggttccc gcgggggccg atgaggtctc cgcccaagcg
151   gcgacggcgt tcacatcgga gggcatccaa ttgctggctt ccaatgcatc
201   ggcccaagac cagctccacc gtgcgggcga agcggtccag gacgtcgccc
251   gcacctattc gcaaatcgac gacggcgccg ccggcgtctt cgccgaatag
```

FIG. 2A

mtbn3
```
1     atgctgtggc  acgcaatgcc  accggagcta  aataccgcac  ggctgatggc
51    cggcgcgggt  ccggctccaa  tgcttgcggc  ggccgcggga  tggcagacgc
101   tttcggcggc  tctggacgct  caggccgtcg  agttgaccgc  gcgcctgaac
151   tctctgggag  aagcctggac  tggaggtggc  agcgacaagg  cgcttgcggc
201   tgcaacgccg  atggtggtct  ggctacaaac  cgcgtcaaca  caggccaaga
251   cccgtgcgat  gcaggcgacg  gcgcaagccg  cggcatacac  ccaggccatg
301   gccacgacgc  cgtcgctgcc  ggagatcgcc  gccaaccaca  tcacccaggc
351   cgtccttacg  gccaccaact  tcttcggtat  caacacgatc  ccgatcgcgt
401   tgaccgagat  ggattatttc  atccgtatgt  ggaaccaggc  agccctggca
451   atggaggtct  accaggccga  gaccgcggtt  aacacgcttt  cgagaagct
501   cgagccgatg  gcgtcgatcc  ttgatcccgg  cgcgagccag  agcacgacga
551   acccgatctt  cggaatgccc  tccctggca  gctcaacacc  ggttggccag
601   ttgccgccgg  cggctaccca  gaccctcggc  caactgggtg  agatgagcgg
651   cccgatgcag  cagctgaccc  agccgctgca  gcaggtgacg  tcgttgttca
701   gccaggtggg  cggcaccggc  ggcggcaacc  cagccgacga  ggaagccgcg
751   cagatgggcc  tgctcggcac  cagtccgctg  tcgaaccatc  cgctggctgg
801   tggatcaggc  cccagcgcgg  gcgcgggcct  gctgcgcgcg  gagtcgctac
851   ctggcgcagg  tgggtcgttg  acccgcacgc  cgctgatgtc  tcagctgatc
901   gaaaagccgg  ttgccccctc  ggtgatgccg  gcggctgctg  ccggatcgtc
951   ggcgacgggt  ggcgccgctc  cggtgggtgc  gggagcgatg  ggccagggtg
1001  cgcaatccgg  cggctccacc  aggccgggtc  tggtcgcgcc  ggcaccgctc
1051  gcgcaggagc  gtgaagaaga  cgacgaggac  gactgggacg  aagaggacga
1101  ctggtga
```

mtbn4
```
1     atggcagaga  tgaagaccga  tgccgctacc  ctcgcgcagg  aggcaggtaa
51    tttcgagcgg  atctccggcg  acctgaaaac  ccagatcgac  caggtggagt
101   cgacggcagg  ttcgttgcag  ggccagtggc  gcggcgcggc  ggggacggcc
151   gcccaggccg  cggtggtgcg  cttccaagaa  gcagccaata  agcagaagca
201   ggaactcgac  gagatctcga  cgaatattcg  tcaggccggc  gtccaatact
251   cgagggccga  cgaggagcag  cagcaggcgc  tgtcctcgca  aatgggcttc
301   tga
```

mtbn5
```
1     atggcggccg  actacgacaa  gctcttccgg  ccgcacgaag  gtatggaagc
51    tccggacgat  atggcagcgc  agccgttctt  cgaccccagt  gcttcgtttc
101   cgccggcgcc  cgcatcggca  aacctaccga  agcccaacgg  ccagactccg
151   cccccgacgt  ccgacgacct  gtcggagcgg  ttcgtgtcgg  ccccgccgcc
201   gccaccccca  cccccacctc  cgcctcgcc   aactccgatg  ccgatcgccg
251   caggagagcc  gccctcgccg  gaaccggccg  catctaaacc  acccacaccc
301   cccatgccca  tcgccggacc  cgaaccggcc  cacccaaac   cacccacacc
351   ccccatgccc  atcgccggac  ccgaaccggc  cccacccaaa  ccacccacac
401   ctccgatgcc  catcgccgga  cctgcaccca  ccccaaccga  atcccagttg
```

FIG. 2B

```
 451   gcgcccccca gaccaccgac accacaaacg ccaaccggag cgccgcagca
 501   accggaatca ccggcgcccc acgtaccctc gcacgggcca catcaacccc
 551   ggcgcaccgc accagcaccg ccctgggcaa agatgccaat cggcgaaccc
 601   ccgcccgctc cgtccagacc gtctgcgtcc ccggccgaac caccgacccg
 651   gcctgccccc caacactccc gacgtgcgcg ccggggtcac cgctatcgca
 701   cagacaccga acgaaacgtc gggaaggtag caactggtcc atccatccag
 751   gcgcggctgc gggcagagga agcatccggc gcgcagctcg cccccggaac
 801   ggagccctcg ccagcgccgt tgggccaacc gagatcgtat ctggctccgc
 851   ccacccgccc cgcgccgaca gaacctcccc ccagcccctc gccgcagcgc
 901   aactccggtc ggcgtgccga gcgacgcgtc caccccgatt tagccgccca
 951   acatgccgcg gcgcaacctg attcaattac ggccgcaacc actggcggtc
1001   gtcgccgcaa gcgtgcagcg ccggatctcg acgcgacaca gaaatcctta
1051   aggccggcgg ccaaggggcc gaaggtgaag aaggtgaagc cccagaaacc
1101   gaaggccacg aagccgccca aagtggtgtc gcagcgcggc tggcgacatt
1151   gggtgcatgc gttgacgcga atcaacctgg cctgtcacc cgacgagaag
1201   tacgagctgg acctgcacgc tcgagtccgc cgcaatcccc gcgggtcgta
1251   tcagatcgcc gtcgtcggtc tcaaaggtgg ggctggcaaa accacgctga
1301   cagcagcgtt ggggtcgacg ttggctcagg tgcgggccga ccggatcctg
1351   gctctagacg cggatccagg cgccggaaac ctcgccgatc gggtagggcg
1401   acaatcgggc gcgaccatcg ctgatgtgct tgcagaaaaa gagctgtcgc
1451   actacaacga catccgcgca cacactagcg tcaatgcggt caatctggaa
1501   gtgctgccgg caccggaata cagctcggcg cagcgcgcgc tcagcgacgc
1551   cgactggcat ttcatcgccg atcctgcgtc gaggttttac aacctcgtct
1601   tggctgattg tggggccggc ttcttcgacc cgctgacccg cggcgtgctg
1651   tccacggtgt ccggtgtcgt ggtcgtggca agtgtctcaa tcgacggcgc
1701   acaacaggcg tcggtcgcgt tggactggtt gcgcaacaac ggttaccaag
1751   atttggcgag ccgcgcatgc gtggtcatca atcacatcat gccgggagaa
1801   cccaatgtcg cagttaaaga cctggtgcgg catttcgaac agcaagttca
1851   acccggccgg tcgtggtca tgccgtggga caggcacatt gcggccggaa
1901   ccgagatttc actcgacttg ctcgaccta tctacaagcg caaggtcctc
1951   gaattggccg cagcgctatc gacgatttc gagagggctg acgtcgttg
2001   a
```

mtbn6
```
   1   ttgagcgcac ctgctgttgc tgctggtcct accgccgcgg gggcaaccgc
  51   tgcgcggcct gccaccaccc gggtgacgat cctgaccggc agacggatga
 101   ccgatttggt actgccagcg cggtgccga tggaaactta tattgacgac
 151   accgtcgcgg tgcttccga ggtgttggaa dacacgccgg ctgatgtact
 201   cggcggcttc gactttaccg cgcaaggcgt gtgggcgttc gctcgtcccg
 251   gatcgccgcc gctgaagctc gaccagtcac tcgatgacgc cggggtggtc
 301   gacgggtcac tgctgactct ggtgtcagtc agtcgcaccg agcgctaccg
 351   accgttggtc gaggatgtca tcgacgcgat cgccgtgctt gacgagtcac
 401   ctgagttcga ccgcacggca ttgaatcgct tgtggggc ggcgatcccg
 451   cttttgaccg cgcccgtcat cgggatggcg atgcgggcgt ggtgggaaac
 501   tgggcgtagc ttgtggtggc cgttggcgat tggcatcctg gggatcgctg
```

FIG. 2C

```
 551    tgctggtagg  cagcttcgtc  gcgaacaggt  tctaccagag  cggccacctg
 601    gccgagtgcc  tactggtcac  gacgtatctg  ctgatcgcaa  ccgccgcagc
 651    gctggccgtg  ccgttgccgc  gcggggtcaa  ctcgttgggg  cgccacaag
 701    ttgccggcgc  cgctacggcc  gtgctgtttt  tgaccttgat  gacgcggggc
 751    ggccctcgga  agcgtcatga  gttggcgtcg  tttgccgtga  tcaccgctat
 801    cgcggtcatc  gcggccgccg  ctgccttcgg  ctatggatac  caggactggg
 851    tccccgcggg  ggggatcgca  ttcgggctgt  tcattgtgac  gaatgcggcc
 901    aagctgaccg  tcgcggtcgc  gcggatcgcg  ctgccgccga  ttccggtacc
 951    cggcgaaacc  gtggacaacg  aggagttgct  cgatcccgtc  gcgaccccgg
1001    aggctaccag  cgaagaaacc  ccgacctggc  aggccatcat  cgcgtcggtg
1051    cccgcgtccg  cggtccggct  caccgagcgc  agcaaactgg  ccaagcaact
1101    tctgatcgga  tacgtcacgt  cgggcaccct  gattctggct  gccggtgcca
1151    tcgcggtcgt  ggtgcgcggg  cacttctttg  tacacagcct  ggtggtcgcg
1201    ggtttgatca  cgaccgtctg  cggatttcgc  tcgcggcttt  acgccgagcg
1251    ctggtgtgcg  tgggcgttgc  tggcggcgac  ggtcgcgatt  ccgacgggtc
1301    tgacggccaa  actcatcatc  tggtacccgc  actatgcctg  ctgttgttg
1351    agcgtctacc  tcacggtagc  cctggttgcg  ctcgtggtgg  tcgggtcgat
1401    ggctcacgtc  cggcgcgttt  caccggtcgt  aaaacgaact  ctggaattga
1451    tcgacggcgc  catgatcgct  gccatcattc  ccatgctgct  gtggatcacc
1501    ggggtgtacg  acacggtccg  caatatccgg  ttctga
```

mtbn7
```
   1    atggctgaac  cgttggccgt  cgatcccacc  ggcttgagcg  cagcggccgc
  51    gaaattggcc  ggcctcgttt  ttccgcagcc  tccggcgccg  atcgcggtca
 101    gcggaacgga  ttcggtggta  gcagcaatca  cgagaccat   gccaagcatc
 151    gaatcgctgg  tcagtgacgg  gctgcccggc  gtgaaagccg  ccctgactcg
 201    aacagcatcc  aacatgaacg  cggcggcgga  cgtctatgcg  aagaccgatc
 251    agtcactggg  aaccagtttg  agccagtatg  cattcggctc  gtcgggcgaa
 301    ggcctggctg  cgtcgcctc   ggtcggtggt  cagccaagtc  aggctaccca
 351    gctgctgagc  acaccgtgt   cacaggtcac  gacccagctc  ggcgagacgg
 401    ccgctgagct  ggcaccccgt  gttgttgcga  cggtgccgca  actcgttcag
 451    ctggctccgc  acgccgttca  gatgtcgcaa  aacgcatccc  ccatcgctca
 501    gacgatcagt  caaaccgccc  aacaggccgc  ccagagcgcg  cagggcggca
 551    gcggcccaat  gcccgcacag  cttgccagcg  ctgaaaaacc  ggccaccgag
 601    caagcggagc  cggtccacga  agtgacaaac  gacgatcagg  cgaccaggg
 651    cgacgtgcag  ccggccgagg  tcgttgccgc  ggcacgtgac  gaaggcgccg
 701    gcgcatcacc  gggccagcag  cccggcgggg  cgttcccgc   gcaagccatg
 751    gataccggag  ccggtgcccg  cccagcggcg  agtccgctgg  cggcccccgt
 801    cgatccgtcg  actccggcac  cctcaacaac  cacaacgttg  tag
```

FIG. 2D

mtbn8

```
1     atgagtatta ccaggccgac gggcagctat gccagacaga tgctggatcc
51    gggcggctgg gtggaagccg atgaagacac tttctatgac cgggcccagg
101   aatatagcca ggttttgcaa agggtcaccg atgtattgga cacctgccgc
151   cagcagaaag gccacgtctt cgaaggcggc ctatggtccg gcggcgccgc
201   caatgctgcc aacggcgccc tgggtgcaaa catcaatcaa ttgatgacgc
251   tgcaggatta tctcgccacg gtgattacct ggcacaggca tattgccggg
301   ttgattgagc aagctaaatc cgatatcggc aataatgtgg atggcgctca
351   acgggagatc gatatcctgg agaatgaccc tagcctggat gctgatgagc
401   gccataccgc catcaattca ttggtcacgg cgacgcatgg ggccaatgtc
451   agtctggtcg ccgagaccgc tgagcgggtg ctggaatcca gaattggaa
501   acctccgaag aacgcactcg aggatttgct tcagcagaag tcgccgccac
551   ccccagacgt gcctaccctg gtcgtgccat ccccgggcac accgggcaca
601   ccgggaaccc cgatcacccc gggaaccccg atcaccccgg aaccccaat
651   cacacccatc ccgggagcgc cggtaactcc gatcacacca acgcccggca
701   ctcccgtcac gccggtgacc ccgggcaagc cggtcacccc ggtgaccccg
751   gtcaaaccgg cacaccagg cgagccaacc ccgatcacgc cggtcacccc
801   cccggtcgcc ccggccacac cggcaacccc ggccacgccc gttaccccag
851   ctcccgctcc acacccgcag ccggctccgg caccggcgcc atcgcctggg
901   ccccagccgg ttacaccggc cactcccggt ccgtctggtc cagcaacacc
951   gggcacccca gggggcgagc cggcgccgca cgtcaaaccc gcggcgttgg
1001  cggagcaacc tggtgtgccg ggccagcatg cgggcggggg gacgcagtcg
1051  gggcctgccc atgcggacga tccgccgcg tcggtgacgc cggctgcggc
1101  gtccggtgtc ccgggcgcac gggcggcggc cgccgcgccg agcggtaccg
1151  ccgtgggagc gggcgcgcgt tcgagcgtgg gtacggccgc ggcctcgggc
1201  gcggggtcgc atgctgccac tgggcgggcg ccggtggcta cctcggacaa
1251  ggcggcggca ccgagcacgc gggcggcctc ggcgcggacg gcacctcctg
1301  cccgcccgcc gtcgaccgat cacatcgaca aacccgatcg cagcgagtct
1351  gcagatgacg gtacgccggt gtcgatgatc ccggtgtcgg cggctcgggc
1401  ggcacgcgac gccgccactg cagctgccag cgcccgccag cgtggccgcg
1451  gtgatgcgct gcggttggcg cgacgcatcg cggcggcgct caacgcgtcc
1501  gacaacaacg cgggcgacta cgggttcttc tggatcaccg cggtgaccac
1551  cgacggttcc atcgtcgtgg ccaacagcta tgggctggcc tacatacccg
1601  acgggatgga attgccgaat aaggtgtact tggccagcgc ggatcacgca
1651  atcccggttg acgaaattgc acgctgtgcc acctacccgg ttttggccgt
1701  gcaagcctgg gcggctttcc acgacatgac gctgcgggcg gtgatcggta
1751  ccgcggagca gttggccagt tcggatcccg tgtggccaa gattgtgctg
1801  gagccagatg acattccgga gagcggcaaa atgacgggcc ggtcgcggct
1851  ggaggtcgtc gacccctcgg cggcggctca gctggccgac actaccgatc
1901  agcgtttgct cgacttgttg ccgccggcgc cggtggatgt caatccaccg
1951  ggcgatgagc ggcacatgct gtggttcgag ctgatgaagc ccatgaccag
2001  caccgctacc ggccgcgagg ccgctcatct gcgggcgttc cgggcctacg
2051  ctgcccactc acaggagatt gccctgcacc aagcgcacac tgcgactgac
2101  gcggccgtcc agcgtgtggc cgtcgcggac tggctgtact ggcaatacgt
2151  caccgggttg ctcgaccggg ccctggccgc cgcatgctga
```
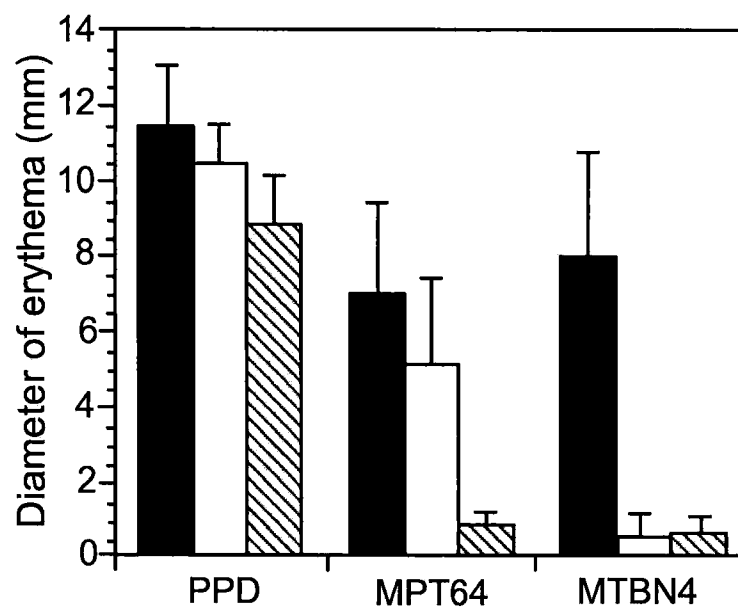
FIG. 2E

FIG. 3

FIG. 1

MTBN1
MTAEPEVRTLREVVLDQLGTAESRAYKMWLPPLTNPVPLNELIARDRRQPLRFALGIMDE
PRRHLQDVWGVDVSGAGGNIGIGGAPQTGKSTLLQTMVMSAAATHSPRNVQFYCIDLGGG
GLIYLENLPHVGGVANRSEPDKVNRVVAEMQAVMRQRETTFKEHRVGSIGMYRQLRDDPS
QPVASDPYGDVFLIIDGWPGFVGEFPDLEGQVQDLAAQGLAFGVHVIISTPRWTELKSRV
RDYLGTKIEFRLGDVNETQIDRITREIPANRPGRAVSMEKHHLMIGVPRFDGVHSADNLV
EAITAGVTQIASQHTEQAPPVRVLPERIHLHELDPNPPGPESDYRTRWEIPIGLRETDLT
PAHCMHTNPHLLIFGAAKSGKTTIAHAIARAICARNSPQQVRFMLADYRSGLLDAVPDT
HLLGAGAINRNSASLDEAVQALAVNLKKRLPPTDLTTAQLRSRSWWSGFDVVLLVDDWHM
IVGAAGGMPPMAPLAPLLPAAADIGLHIIVTCQMSQAYKATMDKFVGAAFGSGAPTMFLS
GEKQEFPSSEFKVKRRPPGQAFLVSPDGKEVIQAPYIEPPEEVFAAPPSAG*

MTBN2
MEKMSHDPIAADIGTQVSDNALHGVTAGSTALTSVTGLVPAGADEVSAQAATAFTSEGIQ
LLASNASAQDQLHRAGEAVQDVARTYSQIDDGAAGVFAE*

MTBN3
MLWHAMPPELNTARLMAGAGPAPMLAAAAGWQTLSAALDAQAVELTARLNSLGEAWTGGG
SDKALAAATPMVVWLQTASTQAKTRAMQATAQAAAYTQAMATTPSLPEIAANHITQAVLT
ATNFFGINTIPIALTEMDYFIRMWNQAALAMEVYQAETAVNTLFEKLEPMASILDPGASQ
STTNPIFGMPSPGSSTPVGQLPPAATQTLGQLGEMSGPMQQLTQPLQQVTSLFSQVGGTG
GGNPADEEAAQMGLLGTSPLSNHPLAGGSGPSAGAGLLRAESLPGAGGSLTRTPLMSQLI
EKPVAPSVMPAAAAGSSATGGAAPVGAGAMGQGAQSGGSTRPGLVAPAPLAQEREEDDED
DWDEEDDW*

MTBN4
MAEMKTDAATLAQEAGNFERISGDLKTQIDQVESTAGSLQGQWRGAAGTAAQAAVVRFQE
AANKQKQELDEISTNIRQAGVQYSRADEEQQQALSSQMGF*

MTBN5
MAADYDKLFRPHEGMEAPDDMAAQPFFDPSASFPPAPASANLPKPNGQTPPPTSDDLSER
FVSAPPPPPPPPPPPPTPMPIAAGEPPSPEPAASKPPTPPMPIAGPEPAPPKPPTPPMP
IAGPEPAPPKPPTPPMPIAGPAPTPTESQLAPPRPPTPQTPTGAPQQPESPAPHVPSHGP
HQPRRTAPAPPWAKMPIGEPPPAPSRPSASPAEPPTRPAPQHSRRARRGHRYRTDTERNV
GKVATGPSIQARLRAEEASGAQLAPGTEPSPAPLGQPRSYLAPPTRPAPTEPPPSPSPQR
NSGRRAERRVHPDLAAQHAAAQPDSITAATTGGRRRKRAAPDLDATQKSLRPAAKGPKVK
KVKPQKPKATKPPKVVSQRGWRHWVHALTRINLGLSPDEKYELDLHARVRRNPRGSYQIA
VVGLKGGAGKTTLTAALGSTLAQVRADRILALDADPGAGNLADRVGRQSGATIADVLAEK
ELSHYNDIRAHTSVNAVNLEVLPAPEYSSAQRALSDADWHFIADPASRFYNLVLADCGAG
FFDPLTRGVLSTVSGVVVVASVSIDGAQQASVALDWLRNNGYQDLASRACVVINHIMPGE
PNVAVKDLVRHFEQQVQPGRVVVMPWDRHIAAGTEISLDLLDPIYKRKVLELAAALSDDF
ERAGRR*

FIG. 1A

FIG. 1 (continued)

MTBN6

LSAPAVAAGPTAAGATAARPATTRVTILTGRRMTDLVLPAAVPMETYIDDTVAVLSEVLE
DTPADVLGGFDFTAQGVWAFARPGSPPLKLDQSLDDAGVVDGSLLTLVSVSRTERYRPLV
EDVIDAIAVLDESPEFDRTALNRFVGAAIPLLTAPVIGMAMRAWWETGRSLWWPLAIGIL
GIAVLVGSFVANRFYQSGHLAECLLVTTYLLIATAAALAVPLPRGVNSLGAPQVAGAATA
VLFLTLMTRGGPRKRHELASFAVITAIAVIAAAAFGYGYQDWVPAGGIAFGLFIVTNAA
KLTVAVARIALPPIPVPGETVDNEELLDPVATPEATSEETPTWQAIIASVPASAVRLTER
SKLAKQLLIGYVTSGTLILAAGAIAVVVRGHFFVHSLVVAGLITTVCGFRSRLYAERWCA
WALLAATVAIPTGLTAKLIIWYPHYAWLLLSVYLTVALVALVVVGSMAHVRRVSPVVKRT
LELIDGAMIAAIIPMLLWITGVYDTVRNIRF*

MTBN7

MAEPLAVDPTGLSAAAAKLAGLVFPQPPAPIAVSGTDSVVAAINETMPSIESLVSDGLPG
VKAALTRTASNMNAAADVYAKTDQSLGTSLSQYAFGSSGEGLAGVASVGGQPSQATQLLS
TPVSQVTTQLGETAAELAPRVVATVPQLVQLAPHAVQMSQNASPIAQTISQTAQQAAQSA
QGGSGPMPAQLASAEKPATEQAEPVHEVTNDDQGDQGDVQPAEVVAAARDEGAGASPGQQ
PGGGVPAQAMDTGAGARPAASPLAAPVDPSTPAPSTTTTL*

MTBN8

MSITRPTGSYARQMLDPGGWVEADEDTFYDRAQEYSQVLQRVTDVLDTCRQQKGHVFEGG
LWSGGAANAANGALGANINQLMTLQDYLATVITWHRHIAGLIEQAKSDIGNNVDGAQREI
DILENDPSLDADERHTAINSLVTATHGANVSLVAETAERVLESKNWKPPKNALEDLLQQK
SPPPPDVPTLVVPSPGTPGTPGTPITPGTPITPGTPITPIPGAPVTPITPTPGTPVTPVT
PGKPVTPVTPVKPGTPGEPTPITPVTPPVAPATPATPATPVTPAPAPHPQPAPAPAPSPG
PQPVTPATPGPSGPATPGTPGGEPAPHVKPAALAEQPGVPGQHAGGGTQSGPAHADESAA
SVTPAAASGVPGARAAAAAPSGTAVGAGARSSVGTAAASGAGSHAATGRAPVATSDKAAA
PSTRAASARTAPPARPPSTDHIDKPDRSESADDGTPVSMIPVSAARAARDAATAAASARQ
RGRGDALRLARRIAAALNASDNNAGDYGFFWITAVTTDGSIVVANSYGLAYIPDGMELPN
KVYLASADHAIPVDEIARCATYPVLAVQAWAAFHDMTLRAVIGTAEQLASSDPGVAKIVL
EPDDIPESGKMTGRSRLEVVDPSAAAQLADTTDQRLLDLLPPAPVDVNPPGDERHMLWFE
LMKPMTSTATGREAAHLRAFRAYAAHSQEIALHQAHTATDAAVQRVAVADWLYWQYVTGL
LDRALAAAC*

FIG. 1B

FIG. 2

mtbn1

```
1     atgactgctg aaccggaagt acggacgctg cgcgaggttg tgctggacca
51    gctcggcact gctgaatcgc gtgcgtacaa gatgtggctg ccgccgttga
101   ccaatccggt cccgctcaac gagctcatcg cccgtgatcg gcgacaaccc
151   ctgcgatttg ccctggggat catggatgaa ccgcgccgcc atctacagga
201   tgtgtggggc gtagacgttt ccggggccgg cggcaacatc ggtattgggg
251   gcgcacctca aaccgggaag tcgacgctac tgcagacgat ggtgatgtcg
301   gccgccgcca cacactcacc gcgcaacgtt cagttctatt gcatcgacct
351   aggtggcggc gggctgatct atctcgaaaa ccttccacac gtcggtgggg
401   tagccaatcg gtccgagccc gacaaggtca accgggtggt cgcagagatg
451   caagccgtca tgcggcaacg ggaaaccacc ttcaaggaac accgagtggg
501   ctcgatcggg atgtaccggc agctgcgtga cgatccaagt caacccgttg
551   cgtccgatcc atacggcgac gtctttctga tcatcgacgg atggcccggt
601   tttgtcggcg agttccccga ccttgagggg caggttcaag atctggccgc
651   ccaggggctg gcgttcggcg tccacgtcat catctccacg ccacgctgga
701   cagagctgaa gtcgcgtgtt cgcgactacc tcggcaccaa gatcgagttc
751   cggcttggtg acgtcaatga aacccagatc gaccggatta cccgcgagat
801   cccggcgaat cgtccgggtc gggcagtgtc gatggaaaag caccatctga
851   tgatcggcgt gcccaggttc gacggcgtgc acagcgccga taacctggtg
901   gaggcgatca ccgcgggggt gacgcagatc gcttcccagc acaccgaaca
951   ggcacctccg gtgcgggtcc tgccggagcg tatccacctg cacgaactcg
1001  acccgaaccc gccgggacca gagtccgact accgcactcg ctgggagatt
1051  ccgatcggct gcgcgagac ggacctgacg ccggctcact gccacatgca
1101  cacgaacccg cacctactga tcttcggtgc ggccaaatcg ggcaagacga
1151  ccattgccca cgcgatcgcg cgcgccattt gtgcccgaaa cagtccccag
1201  caggtgcggt tcatgctcgc ggactaccgc tcgggcctgc tggacgcggt
1251  gccggacacc catctgctgg gcgccggcgc gatcaaccgc aacagcgcgt
1301  cgctagacga ggccgttcaa gcactggcgg tcaacctgaa gaagcggttg
1351  ccgccgaccg acctgacgac ggcgcagcta cgctcgcgtt cgtggtggag
1401  cggatttgac gtcgtgcttc tggtcgacga ttggcacatg atcgtgggtg
1451  ccgccggggg gatgccgccg atggcaccgc tggccccgtt attgccggcg
1501  gcggcagata tcgggttgca catcattgtc acctgtcaga tgagccaggc
1551  ttacaaggca accatggaca agttcgtcgg cgccgcattc gggtcgggcg
1601  ctccgacaat gttcctttcg ggcgagaagc aggaattccc atccagtgag
1651  ttcaaggtca agcggcgccc ccctggccag gcatttctcg tctcgccaga
1701  cggcaaagag gtcatccagg ccccctacat cgagcctcca gaagaagtgt
1751  tcgcagcacc cccaagcgcc ggttaa
```

mtbn2

```
1     atggaaaaaa tgtcacatga tccgatcgct gccgacattg gcacgcaagt
51    gagcgacaac gctctgcacg gcgtgacggc cggctcgacg gcgctgacgt
101   cggtgaccgg gctggttccc gcgggggccg atgaggtctc cgcccaagcg
151   gcgacggcgt tcacatcgga gggcatccaa ttgctggctt ccaatgcatc
201   ggcccaagac cagctccacc gtgcgggcga agcggtccag gacgtcgccc
251   gcacctattc gcaaatcgac gacggcgccg ccggcgtctt cgccÉaatag
```

Ég

mtbn3

```
1     atgctgtggc acgcaatgcc accggagcta aataccgcac ggctgatggc
51    cggcgcgggt ccggctccaa tgcttgcggc ggccgcggga tggcagacgc
101   tttcggcggc tctggacgct caggccgtcg agttgaccgc gcgcctgaac
```

FIG. 2 (continued)

```
 151  tctctgggag aagcctggac tggaggtggc agcgacaagg cgcttgcggc
 201  tgcaacgccg atggtggtct ggctacaaac cgcgtcaaca caggccaaga
 251  cccgtgcgat gcaggcgacg gcgcaagccg cggcatacac ccaggccatg
 301  gccacgacgc cgtcgctgcc ggagatcgcc gccaaccaca tcacccaggc
 351  cgtccttacg gccaccaact tcttcggtat caacacgatc ccgatcgcgt
 401  tgaccgagat ggattatttc atccgtatgt ggaaccaggc agccctggca
 451  atggaggtct accaggccga gaccgcggtt aacacgcttt cgagaagct
 501  cgagccgatg gcgtcgatcc ttgatcccgg cgcgagccag agcacgacga
 551  acccgatctt cggaatgccc tccctggca gctcaacacc ggttggccag
 601  ttgccgccgg cggctaccca gaccctcggc caactgggtg agatgagcgg
 651  cccgatgcag cagctgaccc agccgctgca gcaggtgacg tcgttgttca
 701  gccaggtggg cggcaccggc ggcggcaacc cagccgacga ggaagccgcg
 751  cagatgggcc tgctcggcac cagtccgctg tcgaaccatc cgctggctgg
 801  tggatcaggc cccagcgcgg gcgcgggcct gctgcgcgcg gagtcgctac
 851  ctggcgcagg tgggtcgttg acccgcacgc cgctgatgtc tcagctgatc
 901  gaaaagccgg ttgccccctc ggtgatgccg gcggctgctg ccggatcgtc
 951  ggcgacgggt ggcgccgctc cggtgggtgc gggagcgatg ggccagggtg
1001  cgcaatccgg cggctccacc aggccgggtc tggtcgcgcc ggcaccgctc
1051  gcgcaggagc gtgaagaaga cgacgaggac gactgggacg aagaggacga
1101  ctggtga
```

mtbn4

```
  1   atggcagaga tgaagaccga tgccgctacc ctcgcgcagg aggcaggtaa
 51   tttcgagcgg atctccggcg acctgaaaac ccagatcgac caggtggagt
101   cgacggcagg ttcgttgcag ggccagtggc gcggcgcggc ggggacggcc
151   gcccaggccg cggtggtgcg cttccaagaa gcagccaata agcagaagca
201   ggaactcgac gagatctcga cgaatattcg tcaggccggc gtccaatact
251   cgagggccga cgaggagcag cagcaggcgc tgtcctcgca aatgggcttc
301   tga
```

mtbn5

```
  1   atggcggccg actacgacaa gctcttccgg ccgcacgaag gtatggaagc
 51   tccggacgat atggcagcgc agccgttctt cgaccccagt gcttcgtttc
101   cgccggcgcc cgcatcggca aacctaccga agcccaacgg ccagactccg
151   cccccgacgt ccgacgacct gtcggagcgg ttcgtgtcgg ccccgccgcc
201   gccacccca ccccacctc cgcctccgcc aactccgatg ccgatcgccg
251   caggagagcc gccctcgccg gaaccggccg catctaaacc acccacaccc
301   cccatgccca tcgccggacc cgaaccggcc ccacccaaac cacccacacc
351   ccccatgccc atcgccggac ccgaaccggc cccacccaaa ccacccacac
401   ctccgatgcc catcgccgga cctgcaccca ccccaaccga tcccagttg
451   gcgcccccca daccaccgac accacaaacg ccaaccggag cgccgcagca
501   accggaatca ccggcgcccc acgtaccctc gcacgggcca catcaacccc
551   ggcgcaccgc accagcaccg ccctgggcaa agatgccaat cggcgaaccc
601   ccgcccgctc cgtccagacc gtctgcgtcc ccggccgaac caccgacccg
651   gcctgccccc caacactccc gacgtgcgcg ccggggtcac cgctatcgca
701   cagacaccga acgaaacgtc gggaaggtag caactggtcc atccatccag
751   gcgcggctgc gggcagagga agcatccggc gcgcagctcg cccccggaac
801   ggagccctcg ccagcgccgt gggccaaacc gagatcgtat ctggctccgc
851   ccacccgccc cgcgccgaca gaacctcccc ccagcccctc gccgcagcgc
901   aactccggtc ggcgtgccga gcgacgcgtc caccccgatt tagccgccca
```

FIG 2B

FIG. 2 (continued)

```
 951  acatgccgcg  gcgcaacctg  attcaattac  ggccgcaacc  actggcggtc
1001  gtcgccgcaa  gcgtgcagcg  ccggatctcg  acgcgacaca  gaaatcctta
1051  aggccggcgg  ccaaggggcc  gaaggtgaag  aaggtgaagc  cccagaaacc
1101  gaaggccacg  aagccgccca  aagtggtgtc  gcagcgcggc  tggcgacatt
1151  gggtgcatgc  gttgacgcga  atcaacctgg  gcctgtcacc  cgacgagaag
1201  tacgagctgg  acctgcacgc  tcgagtccgc  cgcaatcccc  gcgggtcgta
1251  tcagatcgcc  gtcgtcggtc  tcaaaggtgg  ggctggcaaa  accacgctga
1301  cagcagcgtt  ggggtcgacg  ttggctcagg  tgcgggccga  ccggatcctg
1351  gctctagacg  cggatccagg  cgccggaaac  ctcgccgatc  gggtagggcg
1401  acaatcgggc  gcgaccatcg  ctgatgtgct  tgcagaaaaa  gagctgtcgc
1451  actacaacga  catccgcgca  cacactagcg  tcaatgcggt  caatctggaa
1501  gtgctgccgg  caccggaata  cagctcggcg  cagcgcgcgc  tcagcgacgc
1551  cgactggcat  ttcatcgccg  atcctgcgtc  gaggttttac  aacctcgtct
1601  tggctgattg  tggggccggc  ttcttcgacc  cgctgacccg  cggcgtgctg
1651  tccacggtgt  ccggtgtcgt  ggtcgtggca  agtgtctcaa  tcgacggcgc
1701  acaacaggcg  tcggtcgcgt  tggactggtt  gcgcaacaac  ggttaccaag
1751  atttggcgag  ccgcgcatgc  gtggtcatca  atcacatcat  gccgggagaa
1801  cccaatgtcg  cagttaaaga  cctggtgcgg  catttcgaac  agcaagttca
1851  acccggccgg  gtcgtggtca  tgccgtggga  caggcacatt  gcggccggaa
1901  ccgagatttc  actcgacttg  ctcgaccota  tctacaagcg  caaggtcctc
1951  gaattggccg  cagcgctatc  cgacgatttc  gagagggctg  acgtcgttg
2001  a
```

mtbn6

```
   1    ttgagcgcac  ctgctgttgc  tgctggtcct  accgccgcgg  gggcaaccgc
  51    tgcgcggcct  gccaccaccc  gggtgacgat  cctgaccggc  agacggatga
 101    ccgatttggt  actgccagcg  gcggtgccga  tggaaactta  tattgacgac
 151    accgtcgcgg  tgctttccga  ggtgttggaa  gacacgccgg  ctgatgtact
 201    cggcggcttc  gactttaccg  cgcaaggcgt  gtgggcgttc  gctcgtcccg
 251    gatcgccgcc  gctgaagctc  gaccagtcac  tcgatgacgc  cggggtggtc
 301    gacgggtcac  tgctgactct  ggtgtcagtc  agtcgcaccg  agcgctaccg
 351    accgttggtc  gaggatgtca  tcgacgcgat  cgccgtgctt  gacgagtcac
 401    ctgagttcga  ccgcacggca  ttgaatcgct  ttgtgggggc  ggcgatcccg
 451    cttttgaccg  cgcccgtcat  cgggatggcg  atgcgggcgt  ggtgggaaac
 501    tgggcgtagc  ttgtggtggc  cgttggcgat  tggcatcctg  gggatcgctg
 551    tgctggtagg  cagcttcgtc  gcgaacaggt  tctaccagag  cggccacctg
 601    gccgagtgcc  tactggtcac  gacgtatctg  ctgatcgcaa  ccgccgcagc
 651    gctggccgtg  ccgttgccgc  gcggggtcaa  ctcgttgggg  gcgccacaag
 701    ttgccggcgc  cgctacggcc  gtgctgtttt  tgaccttgat  gacgcggggc
 751    ggccctcgga  agcgtcatga  gttggcgtcg  tttgccgtga  tcaccgctat
 801    cgcggtcatc  gcggccgccg  ctgccttcgg  ctatggatac  caggactggg
 851    tccccgcggg  ggggatcgca  ttcgggctgt  tcattgtgac  gaatgcggcc
 901    aagctgaccg  tcgcggtcgc  gcggatcgcg  ctgccgccga  ttccggtacc
 951    cggcgaaacc  gtggacaacg  aggagttgct  cgatcccgtc  gcgaccccgg
1001    aggctaccag  cgaagaaacc  ccgacctggc  aggccatcat  cgcgtcggtg
1051    cccgcgtccg  cggtccggct  caccgagcgc  agcaaactgg  ccaagcaact
1101    tctgatcgga  tacgtcacgt  cgggcaccct  gattctggct  gccggtgcca
1151    tcgcggtcgt  ggtgcgcggg  cacttctttg  tacacagcct  ggtggtcgcg
1201    ggtttgatca  cgaccgtctg  cggatttcgc  tcgcggcttt  acgccgagcg
1251    ctggtgtgcg  tgggcgttgc  tggcggcgac  ggtcgcgatt  ccgacgggtc
1301    tgacggccaa  actcatcatc  tggtacccgc  actatgcctg  gctgttgttg
```

FIG. 2C

FIG. 2 (continued)

1351 agcgtctacc tcacggtagc cctggttgcg ctcgtggtgg tcgggtcgat
1401 ggctcacgtc cggcgcgttt caccggtcgt aaaacgaact ctggaattga
1451 tcgacggcgc catgatcgct gccatcattc ccatgctgct gtggatcacc
1501 ggggtgtacg acacggtccg caatatccgg ttctga

mtbn7
1   atggctgaac cgttggccgt cgatcccacc ggcttgagcg cagcggccgc
51   gaaattggcc ggcctcgttt ttccgcagcc tccggcgccg atcgcggtca
101 gcggaacgga ttcggtggta gcagcaatca acgagaccat gccaagcatc
151 gaatcgctgg tcagtgacgg gctgcccggc gtgaaagccg ccctgactcg
201 aacagcatcc aacatgaacg cggcggcgga cgtctatgcg aagaccgatc
251 agtcactggg aaccagtttg agccagtatg cattcggctc gtcgggcgaa
301 ggcctggctg gcgtcgcctc ggtcggtggt cagccaagtc aggctaccca
351 gctgctgagc acacccgtgt cacaggtcac gacccagctc ggcgagacgg
401 ccgctgagct ggcaccccgt gttgttgcga cggtgccgca actcgttcag
451 ctggctccgc acgccgttca gatgtcgcaa aacgcatccc ccatcgctca
501 gacgatcagt caaaccgccc aacaggccgc ccagagcgcg cagggcggca
551 gcggcccaat gcccgcacag cttgccagcg ctgaaaaacc ggccaccgag
601 caagcggagc cggtccacga agtgacaaac gacgatcagg gcgaccaggg
651 cgacgtgcag ccggccgagg tcgttgccgc ggcacgtgac gaaggcgccg
701 gcgcatcacc gggccagcag cccggcgggg gcgttccgc gcaagccatg
751 gataccggag ccggtgcccg cccagcggcg agtccgctgg cggcccccgt
801 cgatccgtcg actccggcac cctcaacaac cacaacgttg tag

mtbn8
1   atgagtatta ccaggccgac gggcagctat gccagacaga tgctggatcc
51   gggcggctgg gtggaagccg atgaagacac tttctatgac cgggcccagg
101 aatatagcca ggttttgcaa agggtcaccg atgtattgga cacctgccgc
151 cagcagaaag gccacgtctt cgaaggcggc ctatggtccg gcggcgccgc
201 caatgctgcc aacggcgccc tgggtgcaaa catcaatcaa ttgatgacgc
251 tgcaggatta tctcgccacg gtgattacct ggcacaggca tattgccggg
301 ttgattgagc aagctaaatc cgatatcggc aataatgtgg atggcgctca
351 acgggagatc gatatcctgg agaatgaccc tagcctggat gctgatgagc
401 gccataccgc catcaattca ttggtcacgg cgacgcatgg ggccaatgtc
451 agtctggtcg ccgagaccgc tgagcgggtg ctggaatcca agaattggaa
501 acctccgaag aacgcactcg aggatttgct tcagcagaag tcgccgccac
551 ccccagacgt gcctaccctg gtcgtgccat ccccgggcac accgggcaca
601 ccgggaaccc cgatcacccc gggaaccccg atcaccccgg gaaccccaat
651 cacacccatc ccgggagcgc cggtaactcc gatcacacca acgcccggca
701 ctcccgtcac gccggtgacc ccgggcaagc cggtcacccc ggtgaccccg
751 gtcaaaccgg cacaccagg cgagccaacc ccgatcacgc cggtcacccc
801 cccggtcgcc ccggccacac cggcaacccc ggccacgccc gttaccccag
851 ctccgctcc acacccgcag ccggctccgg caccggcgcc atcgcctggg
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951 gggcacccca ggggggcgagc cggcgccgca cgtcaaaccc gcggcgttgg
1001 cggagcaacc tggtgtgccg gccagcatg cggggcgggg gacgcagtcg
1051 gggcctgccc atgcggacga atccgccgcg tcggtgacgc cggctgcggc
1101 gtccggtgtc ccgggcgcac gggcggcggc cgccgcgccg agcggtaccg
1151 ccgtgggagc gggcgcgcgt tcgagcgtgg gtacggccgc ggcctcgggc
1201 gcggggtcgc atgctgccac tgggcgggcg ccggtggcta cctcggacaa

FIG. 2D

FIG. 2 (continued)

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1251 ggcggcggca ccgagcacgc gggcggcctc ggcgcggacg gcacctcctg
1301 cccgcccgcc gtcgaccgat cacatcgaca aacccgatcg cagcgagtct
1351 gcagatgacg gtacgccggt gtcgatgatc ccggtgtcgg cggctcgggc
1401 ggcacgcgac gccgccactg cagctgccag cgcccgccag cgtggccgcg
1451 gtgatgcgct gcggttggcg cgacgcatcg cggcggcgct caacgcgtcc
1501 gacaacaacg cgggcgacta cgggttcttc tggatcaccg cggtgaccac
1551 cgacggttcc atcgtcgtgg ccaacagcta tgggctggcc tacatacccg
1601 acgggatgga attgccgaat aaggtgtact tggccagcgc ggatcacgca
1651 atcccggttg acgaaattgc acgctgtgcc acctacccgg ttttggccgt
1701 gcaagcctgg gcggctttcc acgacatgac gctgcgggcg gtgatcggta
1751 ccgcggagca gttggccagt tcggatcccg gtgtggccaa gattgtgctg
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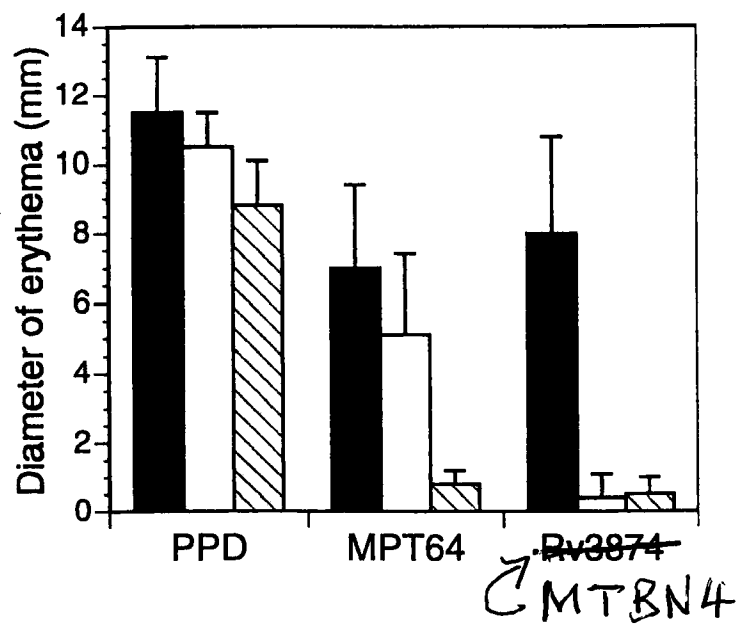
FIG. 2E

FIG 3